

Project No: MCC001901030201

Project: Final Remedial Investigation

Client: AFCEE

Location: Site 24 - Vandenberg AFB

Northing: 640085.062

Borehole ID: HGL27(24MW9B)

Date: 10/31/2002

24-PMW-9

Geologist: M. Jackson
Checked By: D. Smith, R.G.
24-MW-9A

Ground Surface Elevation(ft msl): 460.29

Easting: 1768121.187

SUBSURFACE PROFILE					SAMPLE			Γ	
Depth	Symbol	Description	nscs	Elevation	Recovery %	Blow Counts	PID (ppm)	Water Level	Remarks
2-1		Sand Moderate yellowish brown, moist, soft, 80% Medium fine grained sand with sand , 20% gravel (angular)	Fill						
6-	\bowtie			453	5	32/24/26	1.6		Appear to have pushed rock in 5'-6.5' sample.
8-		Poorly graded sand Dark yellowish orange with pale	SP						
10-		yellowish brown mottling, moist, soft, 100% fine grained sand	-		60	50/50 for 4"	1.5		
12-						,			
14-				445					
16		Sand with silt	SM		90	43/39/50 for 5"	1.6		
18		Pale yellowish brown, moist, medium dense, 90% fine grained sand, 10% silt minor lenses (thin) of clayey sand to	· · · · · · · · · · · · · · · · · · ·	441					
20-		approximately 18'	SP	439	90	27/41/39	1.9		10/01/00 15/0 0
22-		Poorly graded sand Pale yellowish brown with dark yellowish orange mottling, moist, soft, 100% fine	sc	405					10/31/02 1540 Set temporary well at 21'. Insufficient water to
26		grained sand, trace silt minor lense of clayey sand at 19.5'-19.7'	SP	435		00/50/50 5 57			sample shallow zone.
]		Sand with clay	٥.		100	33/50/50 for 5"	1.3		,
28-		Pale yellowish brown to pale brown,							
30-		moist, medium dense, 85% fine grained sand, 15% clay			100	41/41/48	1.6		
32		Poorly graded sand							
34-		Pale yellowish brown, very moist, dense, 85% medium grained sand, 15% clay							
36-		(clay in small lenses, medium plasticity, medium dark gray,			80	24/30/40	1.0		
38-		unit becomes 95% medium grained sand and 5% clay at 35'	SC	422					11/1/02 0840 Temporary
40-					80	30/50 for 4"	2.1		well set at 39'. Near top of sand with clay.

Drilled By: Layne Christensen

HydroGeoLogic, Inc.

Drill Method: Dual Tube Percussion

4600 Northgate Blvd., Suite 207 Sacramento, CA 95834

Drilling Equipment: AP-1000

(916) 614-8770 FAX (916) 614-8775

Sampling Equipment: CA Mod Split Spoon

Boring Diameter: 10"

Total Depth Drilled: 65'

Sheet: 1 of 2



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Description Descr	SUBSURFACE PROFILE					SAMPLE				
Pale yellowish brown mottled with dark yellowish orange, moist, hard, 80% medium grained sand, 20% clay Poorly graded sand Pale yellowish brown, moist to very moist, soft, 100% coarse sand unit became medium sand and saturated at 45' seam of variegated gravel (0.4 mm x 0.3 mm) at 48' unit became 95% fine grained sand with 5% gravel (variegated, 4 mm x 2 mm) at 50' unit became 100% medium sand at 60' Clay with silt Olive gray, moist, stiff, low plasticity, nodules of carbon in clay, 95% clay, 5% silt Boring converted to deep well 24MW98. Permanent monitoring wells 24PMW98 and 24MW98 placed adjacent to this horing.	Depth	Symbol	Description	nscs	_		Blow Counts	PID (ppm)	Water Level	Remarks
at 45' seam of variegated gravel (0.4 mm x 0.3 mm) at 48' 56 unit became 95% fine grained sand with 5% gravel (variegated, 4 mm x 2 mm) at 50' 60 unit became 100% medium sand at 60' 61 Clay with silt Olive gray, moist, stiff, low plasticity, nodules of carbon in clay, 95% clay, 5% silt 62 Solve 100 25/42/50 for 5" 3.5 CL 100 17/25/50 for 3" 2.1 68 Boring converted to deep well 24MW9B. Permanent monitoring wells 24PMW9 and 24MW9A placed adjacent to this porting.	46		Pale yellowish brown mottled with dark yellowish orange, moist, hard, 80% medium grained sand, 20% clay Poorly graded sand Pale yellowish brown, moist to very moist, soft, 100% coarse sand		419	90				
unit became 100% medium sand at 60' Clay with silt Olive gray, moist, stiff, low plasticity, nodules of carbon in clay, 95% clay, 5% silt Clay with silt Olive gray, moist, stiff, low plasticity, nodules of carbon in clay, 95% clay, 5% silt Boring converted to deep well 24MW9B. Permanent monitoring wells 24PMW9 and 24MW9A placed adjacent to this boring.	52 54 54		at 45' seam of variegated gravel (0.4 mm x 0.3 mm) at 48' unit became 95% fine grained sand with							
Clay with silt Olive gray, moist, stiff, low plasticity, nodules of carbon in clay, 95% clay, 5% silt CL 100 17/25/50 for 3" 2.1 Boring converted to deep well 24MW9B. Permanent monitoring wells 24PMW9 and 24MW9A placed adjacent to this boring	62		50'		395	100	20/40/50 for 5"	3.5		
78-	70 72 74 74		Olive gray, moist, stiff, low plasticity, nodules of carbon in clay, 95% clay, 5%	CL		100	17/25/50 for 3"	2.1		at 65', above clay unit. Boring converted to deep well 24MW9B. Permanent monitoring wells 24PMW9 and

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